

*Majoon*, lastly, is described by Dr. Ainslie, page 176, as a preparation of sugar, milk, ghee, poppy seeds, flowers of the datura, powder of nux-vomica, and sugar. The true *Majoon* however as prepared in Bengal contains neither datura nor nux-vomica. I have already described the process by which it has been manufactured before me.

In the *Journal de Pharmacie*, the most complete Magazine in existence on all pharmaceutical subjects, we find Hemp noticed in several volumes. In the *Bulletin de Pharmacie* t. v. A. 1810, p. 400, we find it briefly described by M. Rouyer, apothecary to Napoleon, and member of the Egyptian scientific commission, in a paper on the popular remedies of Egypt. With the leaves and tops, he tells us, collected before ripening, the Egyptians prepare a conserve, which serves as the base of the *berch*, the *diasmouk*, and the *bernaouy*. Hemp leaves reduced to powder and incorporated with honey or stirred with water constitute the *berch* of the poor classes.

The same work also, (*Bulletin*, vol. i. p. 523, A. 1809,) contains a very brief notice on the intoxicating preparations of Hemp, read by M. De Sacy before the Institute of France in July, 1809. M. De Sacy's subsequent analysis of Makrizi, of which I have given an outline, is however much more rich in details than the article in the *Bulletin*.

(*To be continued.*)

ART. VII.—*Memoir on the Climate, Soil, Produce and Husbandry of Afghanistan and the Neighbouring Countries.*—By Lieut. IRWIN.

It gives us great pleasure to be the means of rescuing from undeserved oblivion, the admirable Memoir on Afghanistan, of which we now present to our readers the first part. The author (then) Lieut. IRWIN accompanied Mr. ELPHINSTONE in his Mission to Cabul, and is honorably mentioned in the preface to Mr. E's justly celebrated work. The Memoir we now publish exists in the Library of the Asiatic Society, and was first brought to our notice by Captain CUNNINGHAM of the Bengal Engineers. Subsequently Dr. SPRY struck by the value of its details on rural economy, proposed its publication to the Agri-

cultural Society. We were unwilling to concede even to that most useful public body, the honor of discharging a duty we felt to be peculiarly our own; our readers will doubtless be gratified at our thus enriching our pages.

In the next number we hope to communicate some information regarding the accomplished author; who, we understand is now a resident in Van Dieman's Land.—EDS.

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*Plan and Division of the Memoir.*

The first 47 paragraphs compose an Introduction which treats of the natural division of the countries under view, their chief ranges of mountains and rivers. I here assign the extent in which I understand the various names for countries, provinces, and districts; without this precaution the matter which follows would have been obscure or prolix, perhaps both. This is divided into four parts. The first part treats of Climate, and is divided into four sections, in which are discussed in their order, the temperature, the winds, the rains, and the salubrity. The second part treats of the Soil, and has no division. The third part treats of Natural History, and is divided into three sections;—in the first, are mentioned the mines and mineral products of these kingdoms; in the second, the most remarkable vegetables; in the third, the animals and carriage. In this part of the memoir some matter has found a place which will scarcely be reckoned interesting in a public view, but which was naturally introduced from the desire of completing the plan originally proposed. The fourth part is an attempt to give some idea of the husbandry. The second, which I entitle “a review of the districts,” details what are the chief occupations and means of subsistence, the chief live stock and kinds of grain, the plenty or scarcity of supplies, and some particulars of a miscellaneous nature; it concludes with an estimate of the population.

The following is a briefer sketch of the contents of this memoir:

Introduction,

I. Climate.—1 Temperature,—2 Winds,—3 Rains,—4 Salubrity.

II. Soil.

III. Natural History.—1 Minerals,—2 Vegetables,—3 Animals.

IV. Husbandry and Cultivation.—1 Husbandry,—2 Review of the Districts.

*Of the Climate, Soil, Products, and Husbandry of Afghanistan and the Neighbouring Countries.*

In the following pages I treat of a wide extent of country, being nearly the whole of the space of which a map has lately been constructed by Lieut. Macartney. In a more particular manner will be treated Afghanistan, which is central in it. Such is the extent and diversity of this last country alone, that were our attention confined to it, still could a brief treatise contain but cursory notices even of the important parts of a subject so extensive; much more must it be so, when the neighbouring tracts are to be in some measure included in the survey. With respect to the accuracy also of the matter here offered, although it be hoped that there is a considerable preponderance of truth, it must be supposed that in the circumstances under which it has been collected and digested, the errors too must be numerous.

2. Afghanistan is bounded on the north by mountains which divide it from Kashkar and Budukhshan; other mountains divide it on the north-west from that part of Toorkistan which lies on this side of the Oxus, and that part of Khorasan which extends north nearly to that river; on the west it includes a part of that famous geographical division; while beyond in this direction is the Persian Khorasan; to the south it has deserts and Bulochistan. The Indus from its exit from the lofty mountains in about the latitude of  $45^{\circ}$  N. sometimes constitutes its eastern boundary, and sometimes is comprehended in it, as will be in the sequel more fully explained. Discarding the provinces of Sindh and Kushmeer, as if parts of India, and also the provinces lately belonging to the monarchy in the south-east of Toorkistan, with the contiguous ones in the north-east of Khorasan, the Afghan people and government may be considered as included within the 35th and 29th degrees of north latitude and the 62nd and 73rd of east longitude.

3. Without discussing the nature of the political connection between Bulochistan and the Afghan monarchy, it seems sufficient for us that there is a practical convenience in naming and considering them separately. Bulochistan, so called from two nations called Bulochis, who compose the bulk of its population, has Afghanistan to the north, a desert dividing it in that quarter from Seestan, (Seestan on the whole lies north-west of Bulochistan); to the west, deserts or very ill-peopled tracts divide it from the Persian province Kirman; to the south is the sea; and to the east Sindh. The government of Sindh

possesses the port of Kirachee, which may be considered as locally within Bulochistan. The country is thus included within the 25th and 31st degrees of north latitude, and the 60th and 70th of east longitude.

4. We have already seen that Afghanistan embraces a part of Khoorasan, an ancient geographical division which has been recognized downwards from the earliest times, not merely in books but in common conversation, and that with little variation, notwithstanding the frequent changes of dominion and even of population in the country. We are not concerned with its southern or western boundaries. To the east it extends in one point to Mookr, and in that neighbourhood may be considered as ending where considerable heights begin; it thus includes the whole of the Dooranee country. Seestan too is but a division of it. In more northern latitudes its extent is more difficult to fix. The western part of the Paraparnisan range of hills with the valleys contained and the neighbouring plains—forming together the country of the Ymaks—both was and is considered as part of Khoorasan; but the eastern part of the same tract which the Huzaras possess may more properly be stiled a broad boundary between it and Hindoostan, in its largest sense, which includes Cabul and even Ghuznee. Still more to the north Khoorasan in ancient times extended to the confines of Budukhshan, thus including My-muna, Undkho, Bulkh, Koonduz, Khoollum, Ghoree, and Talikan. Perhaps Budukhshan itself, and whatever lies on the left of the Punj or Upper Oxus, was formerly part of Khoorasan, while the country on the right was coarsely distinguished as that lying beyond the river (Mawaroolnahr.) But the usage of modern times is contrary to such an extension of the term, and restricts Khoorasan in this quarter nearly by the river Marghab. In Asia rivers seldom form boundaries, but rather are themselves considered as included in certain countries on both their banks, and thus Khoorasan may be allowed to comprehend a certain distance to its right, especially during its upper course. From where that stream empties itself into the Oxus, the Oxus is perhaps for a certain distance the boundary of Toorkistan to the north and Khoorasan to the south. In truth both banks of that great river, but especially the left, are here so barren, that limits are little regarded or understood. Towards the mouth of the river, Toorkistan extends considerably to the left of it, unless we consider Khwaruzm as distinct from either division.

5. The term Toorkistan in its present sense is but modern, and liable to some ambiguity. It may be said to contain the following provinces—

1st, The ancient Khwaruzm, lying towards the mouth of the Oxus chiefly, if not entirely to its left, and the Toorkman deserts extending from it towards the Caspian. 2nd, The tract we have just excluded from the modern Khoorasan, but not including Budukhshan. The natives having no appropriate name for it, I propose to distinguish it by its ancient one of Bactria. 3rd, The tract lying between the Oxus and Jaxartes, with a small territory beyond the latter river. 4th, The country beyond the Jaxartes inhabited by the Kuzzkas to the west and Kirghizes to the east;—tribes but little advanced in society, or acquainted with agriculture. Beyond them to the north we come to the Russian dominions, and on the east the Chinese. A fifth tract to be called Chinese Toorkistan, and not to be included under the term of Toorkistan simply, is to be afterwards mentioned. These general terms will in the sequel be less used than others more particularly applicable to countries of far inferior extent; but preparatory to the enumeration of these, let us sketch the course of the mountains and hills, which chiefly mark out their boundaries and give them their character.

6. The first and greatest ridge is that which forms the boundary to the north of Afghanistan. It originates however near the right of the Burmhpootr river, and running thence in a westerly and northerly direction, forms a boundary of the plains of Hindoostan and the Punjab, which are watered by the streams that either originate in it or the lofty lands beyond it. Within it is contained the fertile valley of Kushmeer, and beyond Kushmeer it forms the lofty tract called Little Tibet, and bounds to the north Pukhlee, into which it seems to send a branch. Crossing the Indus it has no longer the same tendency to the north of west, but running in nearly  $35^{\circ} 25'$  north latitude separates Bhooner, Swad, and Punjkora, small districts now occupied by the Yoosufzyes, and into which its branches extend from Kashkar to the north. Arrived at the river commonly called from this last country, as originating in it, its greatest ridge appears to stretch in a direction to the south of west to a termination in the mountain Hindookoosh, but one minor ridge is detached along the left of the Kashkar river, which it divides from Bajaur to the Punjkora, while others on the right of that river form in their course the cragged country of the Kafeis, (but the Kafeis have some other portions of those mountains, and overhang the low valley of Lughuran. This grand chain has as a whole no acknowledged name among the natives, nor have the European authors yet agreed in one denomination to be given it. It is undoubtedly very lofty, not merely in its central ridge but in most of its lateral branches;

towards Afghanistan this height is usually gained very rapidly, so that not unfrequently low and hot valleys and plains lie at the foot of mountains white with perennial snow.

7. In the opposite quarter they do not preserve one character; Hindookoosh has a rapid descent into Budukhshan, which it divides from the valley of Cabul; more to the east there issues from the great northern ridge another, by geographers named Belur, a term corrupted from the Toorkee word Beloot, signifying a cloud, and which runs perhaps due north and divides Budukhshan, Durwaz, and Kuralegin on the west, from Kashkar on the east. Into all those countries, and beyond them into Toorkistan between the Oxus and Jaxartes, it sends branches generally of considerable height; but according to Lieut. Macartney it cannot be considered as extending beyond the river Jaxartes, which rises in its northern extremity not far from the farthest sources of the Oxus. The Kashkar river too seems to originate in the same neighbourhood but to the east of this range, along the foot of which it generally runs, and by which it is prevented running westwards towards the Caspian. To the left chiefly, or to the east of this river, is the country of Kashkar, which has on the south the great northern chain, so called as lying to the north of Afghanistan. This chain has here a moderate descent, and Kashkar appears to be generally speaking an high plain, which is as it were, supported by it. Many points however remain very obscure. Lieut. Macartney is of opinion that this high plain of Kashkar is surmounted to the north or north-east by another chain of mountains nearly parallel to the first, and in which originate, or partly originate, the Indus and the Kashkar river; and that these mountains in their north-western extremity join the northern extremity of the Belur chain. With respect to this other range which meets the Belur, it seems rather a slight height of land than a lofty ridge, and there is no absurdity in supposing it lower than the ridge first mentioned, though the streams generated in it pierce that ridge. In short, it seems probable that the table land is continued from Tibet as well as the mountains, and this table land naturally has a ridge from which the waters are turned contrary ways, but which need not be supposed lofty above its base. Certain it is that after entering Kashkar travellers from Peshawur to Yarkund, whose course is not very different from due north, have no very high mountains to pass. It is true Kashkar is not destitute of other mountains besides those bounding it to the south and west, but they do not appear to give a character to the country. The north-west part of this table land which lies north of

Kashkar is remarkable for its uniformity and levelness. It is named Pamer, which in the Toorkee of Yarkund signifies "the plain." It appears to be drained west, and probably into the Jaxartes chiefly. The road to Yarkund extends across it for about 60 miles or less, but in length it is said to be double. It is bounded to the south-west by the mountains above Keerategin, and to the north-west by those near the heads of the Jaxartes. Both are of the Belur chain, which is in fact to be considered as the steep termination of that broad upland tract which extends from the longitude of  $69^{\circ}$  to that of  $93^{\circ}$  east.

8. In this view of the subject Hindookoosh would be considered as a branch sent from this broad tract still further west. This lofty mountain has also its inferior branches spreading in many directions. A very considerable branch appears to extend from the Belur where in its greatest height it gives source to the Oxus and Jaxartes, and proceeding first west and afterwards south-west, separates Keerategin, Wukheeka, and Durwuz, which are drained into the upper Oxus, from Kohun and other places drained into the Jaxartes, as also from some part of the middle of Toorkistan, the waters of which hold their course to the Oxus in its inferior progress. I presume that all the hills of Toorkistan between those great rivers are to be traced to the Belur. That inferior range only called Aktaw, and which lies between Samarkand and the Jaxartes, seems distinct and insulated. With respect to the hills in the Kuzzak and Kirghiz countries beyond the Jaxartes, I know not what is their exact situation or direction. The former people indeed inhabit a tract generally level on the right of the lower Jaxartes. The Kirghizes pasture the Pamer, but have lower and more hilly grounds to the north-west. Geographers mention under the name of Alak, a range which joins to the Belur and continues in the same direction, that is towards the north, dividing the great and little Bucharias of some authors, here called independent and Chinese Toorkistan. Between Hokun, a city to the left of the Jaxartes in its upper course, and Yarkund in Chinese Toorkistan, one route at least leads over a high mountain, and in the latter country all the waters run to easterly instead of westerly points. The Alak range contains some of the sources of the Jaxartes, and in a higher latitude is said to originate the Neelum which, like the Jaxartes, runs to a westerly point. On the other side arises the Kizlsoo, or river of Kashghur and Yarkund, which, however, seems to be fed also from the grand tract of uplands already mentioned to the south, and from a chain of mountains far to the north, which geographers lay down from east to west and call the Altaian chain. Their latitude may be supposed to be  $46^{\circ}$ ,

and that of Yarkund being by Lieutenant Macartney's construction  $40^{\circ} 30'$ , the medium breadth of Chinese Toorkistan will be at least 400 English miles. Beyond the Altaian chain the waters run north into Siberia and the Frozen ocean. All those of Chinese Toorkistan are lost in itself or in the country immediately to the east (which is also subject to China); to this quarter alone does it slope, while in all others it is bounded by land much higher. Thus false is the common opinion of its forming part of what has been called the table land of Asia; the climate alone is sufficient to convince us of the contrary. Though in a higher latitude than any part of Tibet, the climate is much warmer, a fact we need not be surprized at, since we are informed by merchants who have travelled through great Tibet from Kushmeer to Yarkund that at a certain distance beyond Ludakh begins a descent to Yarkund.

9. There prevails in Europe, or did prevail, an opinion that the Caucasian mountains extend uninterruptedly on the south of Geelan and Mazunduran, and through Khoorasan to a junction with the Hindookoosh. It is highly probable the continuity is not broken until we reach a certain distance into the last country, but afterwards we find for a considerable distance only detached hills, seldom of very considerable altitude; or if there be any chain, or chain of hillocks dividing the rain water and the spring torrents, giving source to no rivers. To treat such as a continuation of Caucasus and Hindookoosh is a manifest abuse of terms. It is moreover aiming at a simplicity of arrangement which is excessive, and tends to darken the subject, not to elucidate it; for by such modes of reasoning ranges might be easily traced from any point, and all the hills and mountains of a continent proved to form parts of one range or of its branches. When generalizations so forced are made, nothing can be affirmed or denied of the whole which shall not be untrue of a considerable number of the facts; and recourse must at length be had to sub-divisions of moderate comprehension, which alone conduce to brevity, perspicuity, and the easy development of facts.

10. There even occur cases where though a connection must be allowed to exist, such is the dissimilarity of character in mountains, that they cannot conveniently be made to pass under one name, or treated of except separately; such is that of a chain which though it have no connection with Caucasus, has an undoubted one with Hindookoosh. We have seen that this famous mountain lies nearly due north of Cabul; but in a west or north-west direction from the valley, the roads to Toorkistan lead over a mountain which the natives

frequently call by the same name, and which is undoubtedly connected with it. The course of the mountains thus appears to change from west to south-west, and thence to almost due south, giving rise in that quarter to the Helbund, the greatest river of Khoorasan. The future course of the central and chief ridge it is difficult to ascertain with much minuteness, but its general course seems to be almost due west to the longitude of Hirat. The branches are numerous and extend to considerable distances, being visible from Candahar, and approaching still nearer to Mimuna, Undkho, and Bulkh in the northern directions. These are the mountains which the ancients seem generally to have distinguished by the name Paraparnisan. I say generally, because doubtless quotations might be brought forward in which the term is applied to others. Disregarding such instances, I propose to restrict the term to this range. The Paraparnisan is not so lofty as the great northern chain. Except the mountain called Shadeean, from a village of that name at its foot in the environs of Bulkh, I know no well-ascertained instance of continued snow on any one of them, though it is possible several such exist. They also rise more gradually from their bases than the other chain. Their abruptest descent seems towards Bactria. At their commencement, where they form the tract inhabited by the Gavee Huzaras, they have on the east a gradual descent to the high valley of Cabul, but towards Bactria so rapid, that we soon arrive at climates considerably warmer than Cabul. The table land of Ghuznee, still more elevated than Cabul, bounds to the east the main body of the Paraparnisan which gradually rise from it; to the south-west and north-west the descent into Khoorasan is also in general gradual.

11. Within Afghanistan we have first to notice that range which runs for the most part in latitude 34°. It is difficult to name with much accuracy its commencement to the west. The road from Cabul to south-west passes over no hill; to the eastward, however, of that line we find the valley of Cabul divided from the country to the south by the low ridge of Logur, which still more to the east rises into lofty mountains; these continue to the Indus, holding their course somewhat to the south of east. They even cross the Indus into the district of Attoc and divide (though not accurately) Chhuchh from the Khatirs. Even the hill of Husunubdal from its position and its composition almost seems a detached part of this range, which is of various altitude from the hills of the Khuttuks, seldom sprinkled with snow, to the white mountain, south of Jellalabad, ever crowned with it. The greatest altitude is about the middle, the least to the

east in this range, which is far narrower than the great northern one, is generally much lower, and supports no considerable table land; one corner it is true of the table land of Ghuznee rests on it. From this quarter (the west) the acclivity is gradual, but in most others it is rapid. The white mountain high in itself, appears still higher from its vicinity to the low lands of Jellalabad, whence it rapidly rises. The eastern hills also though so much inferior in height are usually steep, and not easily practicable. The valleys within this range are in general narrow. From its southern side, and east of Jellalabad, it sends off one or more branches to the north-east, in the direction of Swad. This minor range which though low is difficult, forms the boundary to the north-west part of the valley of Peshawur, and all the roads leading thence to Cabul pass through it; where it unites with the great range, it is called Khybur, and the constant inhabitants are chiefly of the Upper Mihmund tribe. To the north-east, in its further progress, succeeds the Ootman-Khel tribe, and here seems to be the greatest height.

12. None of its other branches deserve notice except what may be called the salt range, which proceeds from its southern side in nearly the longitude where commences the preceding, and holds a course to the south-east. At its junction it is inhabited by the Oorukzyes. At a short distance further it forms the country of Upper Bungush, and afterwards continues to Kalabagh on the Indus, and beyond that river to the vicinity of Pind-Dadun Khan, on the right of the Vehut. Its greatest height is at its commencement, but even there it is not very great. In some places it is easily practicable, in others not.

13. Another range runs nearly parallel to that of  $34^{\circ}$  in the medium latitude of  $32\frac{1}{2}^{\circ}$ . Eastward it may be said to begin at the Pezoo pass, and westward it seems to end near Mookr. It supports the south-east corner of the table land of Ghuznee, and in that quarter is of gradual acclivity and a tame character, although the absolute height be considerable. To the east it is more rugged. In height this range on the whole yield to that of  $34^{\circ}$ , for it contains no mountain which bears snow throughout the summer; the eastern part however does not diminish to that lowness which the eastern part does of the range of  $34^{\circ}$ . I know of no considerable height it sends off, but we are not to forget that short range which appears to unite its western extremity with that of the range of  $34^{\circ}$ . It is the eastern buttress of the table land of Ghuznee to which it has a gradual declivity, while to the east it descends with the utmost abruptness, forming a very difficult country, in which live some tribes who quite set at naught the royal authority;

the Jadrans are the chief, and from them those mountains may with propriety be named. They are of a height on the whole not superior to the range of  $32\frac{1}{2}^{\circ}$ , unless the lofty mountain Bunseekun be considered as part of them. It lies towards their northern extremity, and is covered with perpetual snow. The longitude of the Jadran range is, by Lieut. Macartney's calculation, about  $69\frac{1}{2}^{\circ}$ .

14. The southern part of Afghanistan is in all things far more obscure to us than the northern, but chiefly we are ill informed respecting the conformation of the country. It is neither well peopled nor much civilized, nor frequently traversed. It appears to be neither mountainous nor plain, but diversified with numerous small and tame-featured hills. Such a country is naturally in a warm climate but little productive. It certainly contains no mountain on which the snow does not melt before midsummer. The highest is the famous Tukhti Sooleman, called by the Afghans Kuseghur, which rising boldly from the low plain, right of the Indus, appears to the stranger a most conspicuous object, but is certainly far less elevated than the white mountain. From it proceeds a range of mountains in a direction parallel to the Indus, even somewhat beyond the most southern limits of Afghanistan. Their height is but moderate. I know not whether we can trace hills proceeding northwards from the Tukhti Sooleman and bounding Mukulwad and the Daman to the west, or whether the hills which appear from Dera Ismael Khan in that quarter be merely the ends of ridges running east and west, and among others of that of  $32\frac{1}{2}^{\circ}$ . Somewhat more to the north, however, begin some hills which extend for about 30 miles nearly parallel to the Indus, ending at the right bank of the Koorm. Those hills form a double range, and between is a sandy and barren valley known in the neighbourhood under the name of Largee. It is plainly formed from the ruins of these hills which are low and friable. The most eastern range closely hems in the Indus, and little arable land is left between, yet here live the Khusor tribe of Afghans, while the western range belongs to the Murwuts. The Khusor and Murwut hills are not properly comprehended in the southern Afghanistan, which may be considered as having for its northern boundary the range of  $32\frac{1}{2}^{\circ}$  or the river Gomul, or the 32nd degree of north latitude. The other hills of this tract need be but little expatiated on. The country slopes east towards the Indus, south into Bulochistan, and west into the Afghan Khoorasan, or country of the Dooranees. but it is difficult to assign the boundaries of those natural divisions, The western part, inhabited chiefly by the Kakur tribe of Afghans,

is more elevated than the eastern, where live the Sheeranees, Lohanees, Oosturanees, and others, but these hills do not rise to a great height. We need not except even the hill Toba, lying 90 miles to the south-east of Candahar, which is now famous from having been during the last years of Ahmed Shah's life the cool summer retreat of that monarch.

15. Bulochistan is in general a flat and arid country, yet is not destitute of hills. We may trace a low range from near Sihwan, in a direction somewhat to the west of south and parallel to the Indus, almost to the sea-shore. At Sihwan it appears to change its direction, and instead of proceeding north to a junction with the Soolemanee\* range, as represented in former maps, passes north-west, and ends some stage short of Jellalabad of Seestan. On this range is situated Kilat, nearly where it is highest. The mountain called Maran, which lies two days north of that place, is the only one in the range which bears perpetual snow. By this range Seeweestan is separated from that tract to the south-west inhabited by roving tribes of the Rinds in which Kirachee is situated, and the roads are said to be difficult. Towards its termination to the north-west this range seems to connect itself with the hills of the Kakurs; there are other hills in Bulochistan which however seem irreducible to any chain. Kilat and whatever lies west of Seeweestan is commonly reckoned part of the geographical division of Khoorasan. Kirachee is perhaps part of Hindoostan, and Seeweestan certainly is. Sindh is a champaign country. Bhukhur however is situated on a low hill or rock insulated by the Indus, but which must be considered as a prolongation of a low range which runs from the left bank of the river in a south direction diagonally into the desert, ending in the space of 30 miles. Jesulmer in the centre of the Indian desert, is built on an insulated low hill. The country of Kuchh which lies between the desert and the Indian ocean is a hilly one.

16. We have seen that the range of  $34^{\circ}$  and the salt range cross the Indus into the Doab of the Vehut and Indus. This Doab has also branches from the great northern range which run in directions very far from parallel to the preceding. The most remarkable is that which separates Chhuchh Hazara, the Khatirs, and other districts on the west and north-west, from Pothwar on the east and south-east. Towards the commencement of the range live the Gukhurs, a tribe which has been famous in history. Here is the chief elevation, which is but moderate. This Doab has also solitary hills or small ranges, not clearly derivable from any of the above-mentioned chains. The shape

\* I use the term as our geographers seem to do, the natives employ it seldom, and give it a wider application.

and conformation of the country is thus very irregular, and the natural character of the portions very various. The hills and ranges (if indeed any there be) of Seestan and of all parts of Khoorasan are equally irregularly disposed, and cannot in writing be brought clearly before the mind. Few indeed rise to a considerable height.

17. Having concluded our sketch of the ranges of mountains, we now proceed to enumerate the various natural divisions thus formed and marked out. Some have been already mentioned, Kashkar lies north of the great northern range and east of the Belur; to its east is the country of little Tibet. Both are lofty and cold countries, and both seem to be more plain to the north and more mountainous to the south. The Upper Indus is perhaps the boundary. Little Tibet, or a part of it, is by some called Balteestan, from Baltee a Moosulman tribe inhabiting it, but the majority of the people seem to be in little Tibet of the system of religion known in the great Tibet lying to the east of Kushmeer. Little Tibet and Kashkar are as yet independent of the Emperor of China, who never entered them or sent his troops thither, still less has he ever threatened Budukhsan; but part at least of the Pamer is annexed to the Chinese Toorkistan. This extensive country is formed by the northern slope of the great upland track already mentioned (7, 8.) and by the tracts to the north as far as the Altaian chain (8.). Its eastern boundary is unascertained, and probably very uncertain, or marked by desert tracts. Although the whole be firmly attached to the Chinese empire, of which it forms the most western province, it is not under one governor, but many, who seem to be dependent only on the court of Peking. We may distinguish Kashghur and Yarkund in the southwestern angle, Aksoo to the NNE., Ela and Toorfan in the NE. and Khootun (which is not a city, but a country containing seven towns) in the centre. The great majority of the people are of the Toork race, and hence I have called it Chinese Toorkistan. To the north, however, are tribes of pasturing Calmucs; and perhaps this vast province contains some part of the Kobee nation, which although its chief seat be to the east, in the wastes called the desert of Kobee or Sham, yet spreads west into Kashkar, and constitutes the chief population on the banks of the Kashkar river. On the course of this river we find four principalities, and in all, the chiefs are of this race; the highest is the most powerful, and extends his dominion to the right of the Indus, and the mountains north of Swad. These particulars are here the less misplaced, that the countries in question have ever been among the obscurest in Asia, and even the latest inquiries have

but little elucidated them. In future they will be but seldom mentioned.

18. We have already seen that the Belur and Alak chains divide the Chinese from the independent Toorkistan, which stretches thence west to the Caspian, and its three natural divisions into Toorkistan; this side the Oxus. Toorkistan, between the Oxus and Jaxartes, has been mentioned. The boundaries of the last division to the north, where it touches the Russian empire, are supposed to be defined by no great river or mountainous chain or other natural line. Geographers name minor ranges of hills in this division, but it is certain the far greater part is occupied by plains. This is still more true of its western than its eastern parts, and the former in consequence is scarcely an agricultural country, while in the latter we find the greater part of the dominions of the civilized state of Tashkund, and part of that of Kokun, but the capital of that principality and the greater part of the dominions lie in the middle division of Toorkistan. The east of this division contains in addition to Kokun, Keerategen, Wukheet a part of Durwaz, and nearly the whole of Hissar, with some other petty states. All these are hilly countries, and with the exception of the last, they may all be called mountainous; the valleys are of various widths, but generally narrow, and the road from one to another difficult. Durwaz is particularly narrow and impracticable; it lies on the Punj or Upper Oxus, and its princes were of a race which claimed descent from Alexander the Great. By late accounts, the living representative has been expelled by the Keerategenees.\* In the west of this middle division we find Shuhr Subz, an inconsiderable state, and the dominions of Bokhara, which is the most powerful state in Toorkistan. The mountains of the east enter this tract, but diminish in their progress, and at length disappear. The west is therefore an open plain with the exception of the district of Nooruta, in which we find the Akhtan hills. These are of moderate height, although the name would lead us to judge otherwise. The highest of the whole has no snow beyond the middle of April. The extent of the range is not great, and no stream originates in it. The parts of this division of Toorkistan which border on the Aral lake, or sea to the west, are flat, sandy, and uncultivated; and the like is true of the opposite tracts beyond the Jaxartes and of those beyond the Oxus, with the exception of Khwaruzm. This was in ancient times the centre of a powerful kingdom, but now its weight is but small; its

\* Not expelled, but deprived of part of his dominions (December 12th).

foreign dependencies have passed into other hands; the blowing of the sands have submerged part of its territory, and the productiveness of the remainder been lessened by the change artificially made in the course of the river Oxus. Mr. Pinkerton has expressed his scepticism in regard to the fact, and it may well be questioned whether the whole of this river was on that occasion turned; but the learned in the history of Toorkistan assure us that in the — century, the Calmucs did divert a great stream which passed west through the kingdom of Khwaruzm, and made it to run where now runs the Oxus into the lake of Aral. Khwaruzm still has its stream artificially drawn from the Oxus, and which is indispensable to its cultivation and existence. At no great distance from the river commence deserts, which extend to the Caspian, and are traversed by the pasturing tribes of Toorkmans (who moreover possess the sandy banks of the Oxus from Kelif downwards) and some other tribes. The chief city of Khwaruzm is Oorgunj.

19. Bactria, the only remaining part of Toorkistan, lies on the left of the Oxus during its middle course. It is now distinguished into several sub-divisions according to the remarkable cities and the existing distribution of dominion. Beginning from the quarter of Khoorasan, first occurs on this side the Murghab Kuburmach of the Jumshedees, which tribe however living chiefly on the left of the Murghab for this and other reasons (4) we must assign it to Khoorasan. From Kuburmach proceeding in a direction not much different from ENE. we come at the distance of 30, 56, 20, 24, miles to My-muna, Undkho, Shibirghan, and Bulkh, capitals of little states now independent. The traveller has to his right branches of the Paraparnisan, which are generally visible; he pursues his journey in a cultivated or cultivatable country, but beyond it to his left begin sands which continue to the Oxus. That river here holding a course to the north of west while his course is to the north of east, and the cultivatable country being usually of an equal breadth, the tract of sands beyond it is necessarily widest to the west. With Bulkh begins a country of a different character; the Paraparnisan still lies to the south, but the Gavee Paraparnisan, moreover, to the south-east, intervenes between this country and Cabul; and to the east, towards Budukhshan, are branches from the Hindookoosh. Hence is this tract very diversified, and while the south and east are generally hilly or mountainous, the north and west are generally level. Bulkh is itself level, but has dependencies among the valleys of the Paraparnisan to the south. From Bulkh, one very long day's journey of that quarter to the east or south-east,

lies Khoollum, which to the east rises into hills and mountains; this place is subject to Bulkh, the chief of which extends his dominion to within two days of Bamian, where begins the government of the Afghans. The intermediate country is hilly and poor. The chief of Bulkh has influence in the remaining part of Bactria, which lies to the east. Talikan alone is a hostile state, and is independent. Its hills are however less lofty and difficult than those of Ghoree and Khost to the south. Between Ghoree and Khost is Undurab, which is also mountainous. Koonduz lies to the north-west of those places, being in the road between Bulkh and Talikan, four days from the former and one from the latter. It is a level and fertile tract. If to these we add Huzrut Imam, situated thirty-five miles below the junction of the river Koocha with the Oxus and under Hissar, already mentioned as a state beyond the Oxus, we have enumerated the chief remarkable districts in Bactria.

20. The river Koocha in its upper course intersects Budukhshan in its lower boundary, the eastern and southern boundaries have been already mentioned. Its northern limits are more difficult to assign. The natives seem at present to restrict it to the country politically under the chief of Fyzabad (who is a Syud and is stiled Shah) which many consider as a convertible term for Budukhshan; it is situated on the left of the Koocha, five days east of Talikan. It is not easy to discover what extent the majority of European geographers wish to give to Budukhshan, but there seems little or no authority for extending it beyond the river Oxus, and it seems convenient to have a general term for the tract of country which the upper course of that river bounds. It is a diversified country, but its general character is ruggedness and poverty. The valleys are narrow, the mountains steep, the streams rapid;—by far the greater part is subject to Fyzabad. To the north beyond the river are Durwaz, Wukheeha and Keerategin already mentioned, and whose natural character is very similar.

21. The Gavee mountains which have been shewn to connect the Hindookoosh with the great body of the Paraparnisan, divide Bactria on the north-west, from Cabul on the south-east. One of the most frequented roads passes through Bamian and Goorbund, which are narrow tracts. The delightful valley of Cabul is open only to the south, where some inconsiderable heights divide it from the table land of Ghuznee, which here inclines to it. Cabul is politically divided into four tuppas or districts, Logur to the south, Kodamun to the north-west Pughman to the west, and Bhootkhah to the east. To the north and north-west is what is called the Kohistan or highlands of Cabul, in

which the chief valley is that of Punjsher; Ghoshund and Bamian are not included in this term, and lie more to the west within the skirts of the Paraparnisan. East of the valley of Cabul, after a considerable descent, we arrive at the country of Lughman, lying low, under lofty branches of the great northern chain. It is situated to the north or left of the Cabul river, is on the right in the most frequented roads from Peshawur to Cabul, and is of an extent far inferior to that of the valley of Cabul. To the south-east it borders on Jellalabad, a city and district on the right of the Cabul river, diversified with mountains, hills, and plains; its plain is somewhat less spacious than that of Lughman. The city of Jellalabad is passed in all the roads from Peshawur to Cabul, between which places it is nearly intermediate. To the south is the White mountain, the loftiest of the range of  $34^{\circ}$  north, and north-east of Jellalabad beyond the Cabul river is the narrow valley of Koonur, lying on the left of the Kashkar river, which joins that of Cabul opposite Jellalabad. To the west of Koonur lies Lughman.

22. In the enumeration of the chains of mountains, have been already mentioned a branch proceeding from the great northern mountains along the left of the Kashkar river (6) and a branch or branches leaving the range of  $34^{\circ}$  to the east of Jellalabad, and running in a north-east direction (11). The detached branches of these appear to unite, and together they divide the various districts already mentioned, from the greatest of the plains, which are situated between the great northern and the  $34^{\circ}$  chain of mountains. This great plain lies from the foregoing in easterly directions. Although there be no complete interruption to the continuity of this plain, yet do the strait roads between its detached portions sometimes pass over branches from the mountains which bound the whole; that between Peshawur and Bajour conducts north-west, through the Mikmund or Ootman hills (11); we may therefore distinguish Bajour, with the adjoining districts of Punjkera, from the remainder of this great plain which may be called from Peshawur the greatest city it contains. Bajour is peopled by the Purkulanee tribe of Afghans, who are not a part of the Yoosufzyes as supposed by Major Rennel. The chief inhabitants of Koonur are the Degans, who here speak a peculiar tongue. Punjkora is so called as being peopled by five houses or branches of a subdivision of the Yoosufzyes. The plain of Peshawur after those reductions is still comparatively spacious in a country so mountainous as Afghanistan. To the north it has the great northern range, which sends branches into it, forming the upper parts of Swad and Bhooner, while

the lower are level ; to the south it has the range of  $34^{\circ}$  ; and to the east the Indus. Its western boundary has been already detailed. The Yoosufzyes are a numerous tribe, who disregard the royal authority.

23. South of Cabul is the table land of Ghuznee, the boundaries of which to the east, north, and west, have been already mentioned. To the south or south-west it slopes into Khoorasan. It is far from being a perfect plain, having many slight inequalities. Proceeding eastward, we find the Jajee valley, that of the Torees, and others proceeding from the south side of the range of  $34^{\circ}$ , and some of less note which penetrate into that of  $32^{\circ}$  and the Jadran range. At a considerable distance to the south-east is the valley of Bunnoo, situated between the salt range, and the range of  $32\frac{1}{2}^{\circ}$  towards its eastern extremity. It is of an extent far inferior to that of Peshawur. A branch of the salt range divides it from the narrow territory peopled by the Eesa Khel tribe and others to the north-east. It lies on the right of the Indus, and terminates to the north, where that river is closely hemmed in at Kalabagh by the hills. These hills divide it to the north-west from Malgeen, as they divide Malgeen on the north from Bunnoo on the south. Kohat lies still more to the north under the range of  $34^{\circ}$ , and to the west it has Upper Bungeish, a hilly tract. Both Malgeen and Kohat are diversified moreover with very low hills, which seem generally to be from east to west. Neither are spacious.

24. The Eesa Khel plain is bounded to the south by the river Koorm. Beyond that river seems to begin what is by the natives called Daman, a term strictly meaning the lands at the foot of a range of mountains or hills ; in this instance it has perhaps a more general meaning, and includes even some low hills of this quarter. It ends to the south at Sunghur, where begins Sindh. Like most other terms partly descriptive partly arbitrary, it is not by all used in the same latitude, and it seems doubtful whether we are to include in it that tract in which is situated Dera Ismael Khan, and which the natives call Mukulwad. It lies on the right of the Indus, which bounds it to the east. The hills are here at a considerable distance from the river, but both to north and south they approach nearer it. The Dawan most strictly so called, lies west from Mukulwad. I know not whether it be considered as extending to the south, between Upper Sindh and the Sooleemancee hills (see Para. 14.)

25. There being little to add respecting the southern parts of Afghanistan not comprehended in Khoorasan, we may proceed to Sindh

beginning as before mentioned at Sunghur, a place lying in north latitude  $30^{\circ} 40'$ , and east longitude  $70^{\circ} 45'$ . The term Sindh seems to have been originally descriptive; Sindh in the ancient Hinduwee signified ocean, or great river. The people inhabiting the borders of the Indus in process of time applied it to that river as being the greatest and most important; they knew rivers are in all countries great features of a country, but chiefly where it is low and champaign; we need not therefore be surprized if in such cases the tracts lying along the various rivers be named after them. This practice has probably been more general in former times, before foreign conquest introduced new and arbitrary terms, and fiscal or political divisions were adopted, little coincident with natural ones; the last, however, are those chiefly recognized by the cultivators, and various instances still remain to exemplify the principle just mentioned. Were it applied in strictness, Sindh would include all the country at a moderate distance from the river Indus, from its exit from the great northern mountains to the sea. In modern times at least other distinctions have quite superseded the term, if ever applied to the upper course of the Indus. It still remains applicable to the lower, during which it is that this great river is of most importance to the subsistence and comforts of the inhabitants. From Sunghur to the sea, the low fertile country to the right of the Indus is named Sindh; whether on the left bank of the river it ascends to the same latitude seems doubtful. On the one hand Buhawalpoor on the Ghara, at a considerable distance from the Indus, is considered as comprised in Sindh; on the other, Mooltan cannot be denied to lie in the Punjab. Leaving this in uncertainty, we may remark, that from Sunghur to the sea are three natural divisions. 1st. The most northerly in which lies Dera Ghazee Khan, and which may be called Upper Sindh, it may be said to end with the Sooleemane hills. 2nd. The middle division, comprizing the country of the Muzarees, who are independent Beeloches, and south of them the district of Shickarpoor. 3rd. The most southerly, now under the government of chiefs of the Talpoora tribe—this may be called Nether Sindh. To this alone it is that in our maps is given the name of Sindh or Sindhee, but all authority of native writers or native use is against this restriction, which if persevered in, must give rise in our dealings with the people of the country to frequent mistake. Sindh is a narrow champaign country. Its greatest width is in the middle division, and near the sea where the Indus forms a delta. The length may be 400 English miles and the average breadth 50. To the south is the Indian ocean, to the east is the great Indian desert, and

beyond it the Rajpoot states. The country of Kuchh extends from the most southern part of Sindh, in an eastern direction, towards Goojrat. It lies along the Indian ocean, and the name seems originally to have implied 'border or edge', but as the lands bordering rivers are usually low, Kuchh, Kuchhee, and other words from that root seem now in numerous cases to mean low and moist lands near rivers. To the north, Sindh has Mukulwad, the Daman, and the Punjab.

26. West of Sindh lies Bulochistan, there is here however a tract of country which is to be distinguished from both; if included in Bulochistan, it would form its north-east corner, and it lies west of the middle and of part of the upper Sindh; Aboolfuzl seems to have called it Seeweestan—a general term now little in use, but very convenient for us to retain. It contains Seewee, Gunduwah, Dhadur, Laree Bhag, Naree, perhaps Hurnd and Dhajul, and some other towns and districts. It is itself a plain, but has in most quarters low hills for boundaries. A hilly but by no means mountainous tract intervenes between it and Candahar, and in that tract live the Tureens and some other Afghan tribes, while to the traveller's right hand are the Hakurs. At Gunduwah begin hills, and the country is hilly to Kelat, a distance of 120 miles in a direction about north-west. Kelat must be considered as the capital of Bulochistan, though not the greatest city. The surrounding country is but poor. In the western part of Bulochistan are the cities, towns, or districts, of Keech Mikran, Punjgoor, Dezuk, Bempoor, and others; this last is nearly SSW. of Jellalabad, the capital of Seestan, from which it is distant 13 days journey. Of these the three only nearest to Jellalabad are inhabited when the direct road is chosen, but it is said there is a road more to the east which conducts through a country generally inhabited. From Bempoor to the sea it is said to be ten days, and to the first town in Kirman five days. In both cases the country is reported to be inhabited. On the coast of Bulochistan are some harbours of which the most noted is Kirachee, the longitude of which is not very different from that of Kelat. Nearly intermediate between them is Belo. The information is very scanty which is to be gained concerning Bulochistan, a circumstance which perhaps evinces it to be a country little productive or practicable. The chief population of Seeweestan is Indian, but the Beeloches are generally speaking the masters of the country. They are themselves divided into two nations, which were probably distinct in early times. The Koorgal nation is the superior, and its residence is chiefly in the west, and in the hilly tract wherein is situated Kelat. The Rind tribes dwell in the eastern quarters,

and are also the chief population of the south-west, so that in numbers they exceed the other nation.

27. To the north of Seeweestan lie the countries of various Afghan tribes ; to the north of the western part of Bulochistan lies the country of the Bureches, that of the Dooranees, and Seestan ; but the country of the Dooranees stretches a considerable distance beyond in a north-westerly direction. All these are included in Khoorasan. From Candahar to Hirat is a distance of 300 miles from ESE. to WNW. On the traveller's right is the Paraparnisan range, on his left Seestan, of which the capital Jellalabad lies 150 miles west by south from Candahar. From Jellalabad nearly due west, at the distance of 190 miles, is Nih, which though under a separate government is perhaps to be considered as in Seestan. From Nih the country of Ghaeen and Birjund lies north, and is of considerable extent. It lies from Hirat south-west, and from Furah (a considerable place on the left of the road between Candahar and Hirat) west. From Ghaeen, north-west, are Toorshish and Mushhud, which last place lies from Hirat more in a westerly than northerly direction. The country of Khaf lies west of Hirat, and north-west of it, towards Mushhud, is that of Toorbut. Jam and Murv lie to the north. The Afghan dominions end a short distance to the west of Hirat. These divisions which have been enumerated are political ones. The face of the country is too little known, and even if known, is probably too irregular and diversified to be distributed into natural divisions of well marked characters. But the country of the Ymaks, lying to the east of Hirat, is distinguished from all the others as being decidedly hilly, though indeed it possesses some wide valleys and some plains contiguous to the hilly tracts. Of these last the chief is that which lies north from the hilly tracts, but forms part of the north-east boundary of Khoorasan, and in which is situated Huburmach, a place already mentioned. To prevent mistakes it may be observed, that though this tract in general may justly be called the country of the Ymaks, part of that nation is found at some distance from it.

28. We have now rapidly sketched the countries lying west of the Indus, or north of its sources, and proceed to those lying eastward of it. Little Tibet has been already mentioned. It seems to be a country not easily practicable, for we are informed, that the trade from Kushmeer to Yarkund once passed through it because of the road by great Tibet having been forbidden, and that this was considered as an inconvenience. It is certain, a strait line between Kushmeer and Yarkund would pass through the little rather than the great

Tibet, and hence the objections to the former road must have been to its difficulty rather than its circuitousness. Little knowledge is to be gained of either country, but they are known to be poor. Great Tibet extends far to the east from Kushmeer, while the little lies west of that country. Little Tibet is as yet quite independent, except that a few of the low situated villages are now subject to the governor of Kushmeer. South-west of little Tibet, on the banks of the upper Kishengunga, is the independent territory of the Durds, which is very little known.

29. The delightful valley of Kushmeer has already been accurately described by Forster. West of it lies the district of Moozufferabad, abounding in low hills, and beyond it is Pukhlee, which consists partly in hills of considerable height, and partly in a plain or valley lying on the left bank of the Indus. South of it is Chhuchh, and south-east Huzara, of which both are plains. The former lies opposite the lower part of the plain of Peshawur, while Pukhlee is opposite to Bhooner. South of Chhuchh is the country of the Khatirs, and beyond them that of the Uwans, Dhuns, Gheps, and other tribes. The eastern part of this Doab of the Indus and Vehut is chiefly occupied by Pothwar, a country now in subjection to the Sikhs, but the exact limits of which are not easily assigned. A range of hills divide it from Huzara and the Khatirs. This Doab, as before observed, has numerous hills, and though low, they are sometimes very difficult. Where they end to the south begins the country of Mohummud Khan of Lya, which is here sandy and approaching to a desert. This and the other tracts as far as the mouth of the Indus are sometimes known by the name of Lumha, which means in the local dialect, 'south.' The territories of Mohummud on this side the Indus consist of high sands more remote from the river, and a lower and more fertile tract by its banks. The former is named Thul, the latter Kuchhee, both descriptive terms. Of the Kuchhee the southern part at least must be considered as in Sindh. Towards the angle of this Doab to the south the Thul is lost, and all the lands are low, moist, and fertile.

30. The whole of this Doab of the Vehut and Indus has now no name in general use. That of Sindhsagur given it by Akbar, is known only to the readers of the Ayeen Akbery, nor are any of the names given by him to the Doabs of the Punjab in common use. It seems doubtful whether that of the Vehut and Indus is to be considered as part of the Punjab, which many consider as restricted to the space included between the Vehut and Sutluj. To the south-west it

draws to a point where the five rivers are assembled in one stream, and to the north-east it is bounded by the great northern mountains. Within these mountains are many independent states, and also some of the dependencies on Kushmeer, for instance Poonuch and Rajwer. From Jelum on the Vehut to Lodhiana on the Sutluj is about 250 miles of road distance. The Punjab thus restricted is a country universally plain. From Lodhiana to Delhi is 220 miles of road distance, through a flat country; at some distance to the traveller's left, or to the south-west, begins the great Indian desert, which extends to near the sea, dividing the lower Punjab and Sindh from the Rajpoot states. Of these we may mention Jodhpoor to the south, and Beekaneer more to the north. Bhutner lies at the northern extremity of the desert, in a country not naturally unfertile.

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### *Rivers.*

31. Of the rivers in these countries the greatest is the Indus, some have considered it as the boundary of Hindoostan to the west. Both now however, and formerly, we find the Hindee race and language far to the west of the Indus from its first exit from the great northern range to its falling into the sea. It must be considered an unnatural arrangement which should assign the eastern part of the narrow country of Sindh to India, and the western to Persia or Bulochistan. Other boundaries less simple and marked must therefore be sought for. By the inhabitants of Sindh this great stream seems best known under the name of the river. The Punjabees and people in general of the Hindee race distinguish it as the river Sindh; Persians and Khoora-sanees either soften this into Sind, or name the river by the addition of some conspicuous town on its banks, a practice not unknown even to the inhabitants themselves, hence it is best known to many as the river of Attoc. The Afghans have called it 'Ubaseen,' that is father or venerable river; *seen* in their language signifying river. But if we trace upwards the stream thus distinguished by them, we shall find they have selected the lesser, instead of the greater and more remote branch. The Ubaseen of the Afghans rises in the southern face of the great northern chain only 120 miles in a NNE. direction from Attoc. About ninety miles from that place it falls into the true Indus, which comes more from the east. The course of the true Indus is but conjectural, but may be safely said to be long and its source remote, in the table land (see para. 7.) From where it leaves the lofty mountains to the sea it runs in a direction  $24^{\circ}$  west of south, and though it have many

windings, it takes few great sweeps. As far as Attoc it is a rapid river, but at Kalabagh, distant thence 80 miles, it is very slow and still; it is no longer confined on both sides by hills, though to its right are sometimes found hills, and assumes all the well known characters of a river flowing through a champaign country and yielding soil. At Kuheree after having been joined by all the waters of Afghanistan, it is in the ebb season about 1000 yards broad, and where deepest twenty-one feet deep, with a current of two and a half miles an hour. Not far from Mithundakot it receives from the left the Punjnud, in which are collected all the waters of the Punjab, but which is yet much inferior to the Indus. After this junction, that river probably exceeds the Oxus in quantity of water.

32. The Hydaspes is the most westerly of the five rivers of the Punjab. This name originally imposed by the Greeks, is an evident corruption from Vidusta or Velusta, its ancient name in the country, and which the natives of Kushmeer still retain; by the Punjabees it is called Vehut, which the people of our provinces change into Behut; strangers in general usually name it the river of Jelum, from a town of that name built on its left bank in north latitude 33°. Here is a famous ferry, and in the ebb season it may be forded, though with some difficulty. Here too the Punjab may be said to begin, for in the northerly directions are mountainous tracts. The Hydaspes rises in the valley of Kushmeer, and having a slow current in deep muddy banks, soon becomes navigable. Before leaving the valley it joins from the north the Lar river, so called as intersecting the district of that name. After leaving Kushmeer the Hydaspes becomes rapid and unnavigable. At Moozufferabad it receives from the right the Kishengunga, a far inferior stream rising in little Tibet. Various mountain torrents now add their waters, and arriving at Jelum it has gained almost its utmost size. Until it reaches Pind-Dadun Khan, it is at intervals confined by hills on its right; at Rusheedpoor it falls into the Acesines, and near Ahmedpoor the joint river receives the Hydraotes. The Acesines as being the largest and central gives its name to the three, which thus united in one stream pass Mooltan, lying about six miles from the left bank; and at Sheenee Bhukhuree, fifty-six miles from that place, is their conflux with the Ghura, which contains the two eastern rivers of the Punjab. The five rivers thus assembled are called Punjnud. The Punjnud had formerly but a short course before it joined the Indus, and perhaps the term was not then used; but in consequence of an extraordinary rise of the rivers about twenty years ago, their channels were changed, and the Punjnud now runs for about fifty-one

miles parallel with the Indus, which at length it joins opposite to Mithundakot.

33. The Acesines is certainly the largest river of the Punjab. In ancient times, as we are informed by Aboolfuzl, it was called Chunderbhaga, from its being formed of two mountain streams, Chunder and Bhaga. The name Sandabilis used by the latter writers on India among the ancients, seem derivable from Chunderbhaga, but the etymology of Acesines is now obscure. The inhabitants of its bank at this day though not ignorant of the ancient appellation use not it, but Chunkâ, which we and the Persians have changed to Chunab. This great river rises in Kishtwar, a dependency of Kushmeer. There is little reason to think that any of the rivers of the Punjab rises beyond the great mountains in the table land. The Acesines is forded with difficulty even in the ebb season. The Hydraotes was formerly, in the country, called Irawutee, and now Ravee. It is by far the least of the five rivers.

34. To it succeeds the Hyphasis, anciently called by the natives Bypasha, and now Beak or Beas, and lastly the Sutluj. The Sutluj was by the Greeks called Hesudrus. Its ancient name was Shutoodr, and in Peshawur it is to this day usually called Sutloodr; it is inferior to the Acesines, but seems equal to the Hydaspes; yet did the Greeks call the joint stream of the Hyphasis and Hesudrus by the name of the former, a much inferior stream. At present both names are lost, and the river formed of them near Feerozpoor is first called Neelee, and afterwards Ghara, or Ghuloo Ghara; it is no where fordable even in the ebb season, but both its branches are. We are informed by Aboolfuzl that in his time it separated into a number of branches at some distance below its formation. At present, although it have like other rivers of a champaign country small nullahs or branches, it no were sends off a considerable part of its waters. As before mentioned, it falls into the Acesines, nor is there any reason to think that when Major Rennell composed his map and memoir, it held a different course; yet has that excellent geographer rejected Arrian's authority for this fact, without assigning any reason.

35. Between the Jumna and Sutluj are various small streams, very important in a military point of view. The Kughur and some others fall into the Sursootee, a river the course of which has long been a problem. The late inquiries entirely confirm that account which is given in Franklin's life of George Thomas, by which it appears to be lost near Bhutner. There is however a tradition that in former times it passed to the south, and spread itself over the wide expanse of level hard clay in the centre and west of the great Indian desert.

36. By far the greatest tributary of the Indus from the right is the river running under Ukora and Nousuhra in the plain of Peshawur. Captain Wilford has called it the Lundkee Sindh, or little Sindh, a term partially used in the country; but it is to be regretted that in this as in very many other cases, rivers have no proper names as such, and distinct from the towns which may be on their banks. This river joins the Indus less than a mile above Attoc, but on the opposite side. It does not appear probable that it has ever passed under the name of the river of Attoc. Before the junction both rivers are fordable, but after it no longer so. The Indus is the larger in quantity of water as being more rapid, but the channels seem equal. The Ukora river drains a very extensive and various country. Its sources may be divided into western and northern. The most remote of the western are in the mountains which bound the valley of Cabul, which is watered by three principal streams. The least which rises to the south or south-western runs through the capital; there afterwards joins it another from Ghorbund, and still lower that of Punjsher, the largest of the three, and which rises in Hindookoosh; other small streams contribute their waters from the right and left, but the rapidity is such that with all these additions the river is not navigable even by rafts until it join the stream of Lughman, which rises in the Kaper mountains to the north, and intersects that province. Although probably inferior in quantity of water, a gentler current admits of navigation on it by rafts before the junction.

37. Five miles east of Jellalabad joins from the north the Kashkar river, which is a rapid stream, and supposed to contribute three times the quantity of water brought by the united rivers of Cabul and Lughman; for about fifty-four miles the navigation of the river formed of these three streams is interrupted by no obstacle, yet are boats used in one place only (Dhukka) and there for ferrying merely; for about thirty-two miles further, to Micknee, occur at intervals, rocks, whirlpools, and cataracts, which are reckoned up to the number of thirty-two. The river in this space pierces the secondary range of hills already mentioned (see para. 11.) A passage down the river is at no season impracticable on rafts, but it is safest in the flood season, for although the violence of the stream be then increased, greater depth of water removes all danger arising from many of the rocks. The upper Mihmunds who live chiefly on the left of the river along this dangerous tract, take advantage of the difficulties of the traveller to rob him or extort a ransom.

38. From Micknee to the Indus the river flows with a moderate

current through the valley of Peshawur, which it fertilizes. A short distance below Micknee it divides into two branches ; the lesser, usually called the Shuhalum river from a village of that name, passes only four miles to the north of Peshawur. It unites twenty-five miles in a straight line from the point of division with the Hadezy or other branch, which had previously received from the north-east the river of Swad, inferior to itself. The river is now completely formed, and proceeds to the Indus a distance of thirty-five miles. It divides (though not exactly) the Yoosufzyes to the north from the Khutuks and other obedient tribes to the south. The Mihmudzy tribe inhabit chiefly the district of Hushtungur, lying on the left bank of the Swad river. In the Doab between it and the Hadezy live the Gugeeanees, and the upper Mihmunds and Ootman-Khel tribe bound them to the north and west. In the island of Hadezy and Shuhalum live the Daoodzyes ; south of them and the Shuhalum are the Khuleels, who live chiefly to the west of Peshawur, and the lower Mihmunds who live chiefly to the east of it ; to the east of them are the northern Khutuks. The people of the south of the plain draw but little water for irrigation from the river ; their neighbourhood to Peshawur and the great road exposes them to oppression and military rapine. The canals which formerly existed are now in a state of complete or partial decay. The Boodhunee however which rises from springs in the plain is increased to twice its natural size by the introduction of water from the Shuhalum. The Bara is a more important stream, though in size very inconsiderable. It rises to the south-west in Teera, a well peopled district, situated high on the range of  $34^{\circ}$ , and diversified with hill and plain ; whatever is suffered by the Afreedees, or people of that country, to flow to the plain, is by the government appropriated in the following manner—A certain quantity reckoned by the number of mills it can (if required) turn is taken for the use of the city and gardens of Peshawur. The remainder is to be equally divided between the lower Mihmunds and the Khuleels, but no rule has been established which does not give rise to unceasing jealousies and suspicions between these two parties, which often break forth into open war.

39. If computed from its western sources to its mouth, the general course of the Ukora river is a little to the south of east, according to the direction of the range of  $34^{\circ}$ , and in length, in a strait line, about 200 miles ; but its greatest streams come from the north. The Kashkar river rises remote in the table land. Before piercing the great northern range it receives from the east the Sheesa, which rises

behind them, contrary to the Ubaseen. After crossing the line of the great northern range it still remains hemmed in by its branches (see para. 6) and continues to its mouth a rapid stream. It is navigable for rafts only as far as Asmar, seventy-five miles from its mouth; thence upwards it is exceedingly rocky. In the ebb season it is fordable by horsemen in various places, and in some, a party of men on foot, by joining hands, can with difficulty cross it. At Chughsuræe it receives from the right the stream of Pech, running in a valley of that name, through which leads a road north-west to Budukhsan. The other northern stream is that of Swad, which has a general course from the north-east. Arrived in the plains it is joined in the north-west by the inferior stream of Punjkora. They unite near Khizree Khel, forty miles from Peshawur.

40. The other additions to the Indus are but inconsiderable. Pukhlee and Bhooner have their rivulets and torrents, and in the former may be noticed the fern much used in agriculture. The Huro rising in the territory of the Gakhurs (see para. 16) intersects Huzara and part of Chhuchh, but leaving it falls into the Indus between Attoc and Neelab, in the country of the Khutuks. The Swan, a much superior stream, rises in the district of Moozufferabad, and passing through Pothwar and some other districts of that Doab joins the Indus some miles above Kalabagh. The To rising in upper Bungush and Teera, waters Kohat and falls into the Indus after a short course. Malgeen has its rivulet. Bunnoo is well watered by the Koorm. This river has very numerous sources draining the left of the salt range, part of the left of that of  $34^{\circ}$ , the Jadran range, and the right of that of  $32\frac{1}{2}^{\circ}$ . Perhaps the chief is that which is traced to the White mountain, in which case the Koorm has a course from north-west to south-east. Its greatest tributary is the Gumbela, rising in the western part of the range of  $32\frac{1}{2}^{\circ}$ ; even at its mouth the Koorm is but a small river, and probably discharges not more than a tenth of the water discharged by the Ukora river. Still less is the Gomul, whose course is near the south or right of the range of  $32\frac{1}{2}^{\circ}$ . It does not in ordinary times reach the Indus, but is expended in the agriculture of the Daman. After heavy rains however it exceeds the demands made on it, and spreads itself over the Daman and Mukulwad on its way to the Indus.

41. In Afghanistan, south of the Gomul, and in the whole of Bulochistan is no stream of magnitude or whose waters reach the sea; it is in like manner with the Persian Khoorasan; but in the Afghau Khoorasan are some considerable ones. The greatest is the Kelbund

which rises contrary to the Ghorbund stream. After running a considerable distance in the Huzara country it enters that of the Dooranees, and passes to the west of Girishk. It finally discharges itself into the lake of Seestan. It is a rapid river, especially during the first part of its course, and the quantity is certainly considerable in the summer, but Mr. Forster who passed it at Girishk on the 17th November, 1783, describes it, without naming it, as a small stream of good water. In the ebb season it is fordable in certain places, but in that of the floods must be passed by means of boats or by means of pumpkins. Except towards Seestan, where the bottom is composed of sand only, the channel has a mixture of stone and sand. The banks are generally high, and the river never sends natural branches to a considerable distance. Art however has drawn out some canals. The most famous is that made by the late Payenda Khan Barukzy, and lately repaired in the midst of civil broils by his son and successor Futteh Khan. It is drawn from the right of the river. The general course of the Helbund is about south-west.

42. Not far below Girishk it receives the Urghundab from the left. This stream is of far inferior magnitude, and in the ebb season is easily fordable in all places. It rises in the south-eastern extremities of the Paraparnisan, not far from Sooltan Safee, and has Candahar not far distant from its left bank. It is afterwards joined by the Turnuk, or rather by a part of that little stream, for another part is lost in sands. The Turnuk drains part of the Kakur country and of the table land of Ghuznee, and is reckoned to have its principal source near Mookr. Equal to the Urghundab is the Khashrood, that stream which runs under Dilaram to its right. It rises in the Paraparnisan chain, and after a course nearly south falls into the Helbund near Kohinsheen, three days journey below Girishk. The Furahrood, so called from Furah, which is situated on its left bank, also rises in the Paraparnisan, but from parts of it more westerly; it never joins the Helbund, but pursues a separate course into Seestan, where according to some accounts it gains the lake; but according to others, is in the ebb season at least lost in the sands. It is twice as large as the Khashrood, and its course seems to be south-east.

43. Such are the streams which take their rise in the south side of the Paraparnisan. From the west rises the river of Hirat, called by the people of Khoorasan 'Pool-i-Malan,' and by those of Toorkistan 'Tejun'; it is the Ochus of the ancients, and is said formerly to have reached the Caspian sea. At present it is lost in the desert south of the Oxus in a direction north-west of Hirat. It is twice crossed in

the ordinary road from Candahar through Hirat to Persia. Except in the season of rain it is very small, and much of its waters are expended in agriculture. The ancient Margus or modern Murghab, whose sources are not far distant from those of the Ochus, is perhaps of an equal size. It runs nearly due north, and after passing Muro, at some distance to its left, pursues a solitary course through sands to the Oxus, which it barely reaches. A considerable rivulet from the Paraparnisan, waters successively the districts of Mymuna and Undkho, but never gains the Oxus. Bulkhab has eighteen streams, but of those some are canals drawn by art from natural ones, rising in the mountains to the south. None of them can aspire to the name of a river. That called the Bulkhab is the chief. Advancing eastward we come to the stream of Khoollum, and after it, that of Koonduz, which is more considerable, and composed of three principal branches draining Talikan, Ishkumish, and Ghoree. This last is the most to the west or left of the three. The middle one it is which is sometimes known by the name of Bungee. The river composed of these three streams is equal to the Swad, and pursues a north-westerly course to the Oxus.

44. That great river, according to information received by Lieut. Macartney, rises from a glacier of the Poocht-i-Khur, a lofty mountain of the Belur. The natives of the country content themselves with tracing it to Durwaz, and usually confess their ignorance of its earlier progress. The first considerable stream it receives is the Soorkhab, or river of Keerategin, it afterwards joins the Koocha from Budukhshan, and the Oxus now ceases to be fordable. From being very rapid and precipitous, it now gradually assumes the character of stillness, and gently glides over a sandy bed to the Aral lake, where it is lost. Besides the tributaries already mentioned, the Zurufshan, or river of Bokhara, joins it when flooded; it has a south-westerly course. That of Keerategin runs nearly south, the Koocha north-west. The Zurufshan is but an inconsiderable stream in quantity of water, but is indispensable to the agriculture of Samarkand and Bokhara. The Oxus is by the natives of Toorkistan called Umoo, a name which strangers change to Hamoo; but during its upper course among the mountains it is called Punj. Its course is not much to the north of west.

45. The extreme sources of the Jaxartes are not far distant from those of the Oxus, but it holds a more northerly course. Towards its mouth however it is said again to approach the Oxus, and according to some it actually joins it before it falls into the Aral. In size it is much inferior, although a considerable river. Its chief tributary is the Chilchik, which falls into it from the north-east, a few miles above

Tashkund. The Jaxartes is now called Sir or Seer, but the Arabian geographers name it Syhoon, and the Oxus, Jyhoon. In the winter it is to be crossed in some places on the ice, but in summer rafts are used. In the Oxus both rafts and boats are used. The practice with respect to both, and on both rivers, is to yoke to them the passenger's horses and cause them to transport them across by swimming. Of the Neelum we know only that it falls into the lake of Aral, and comes from an easterly point.

46. Nor is our knowledge much more detailed of the streams of Chinese Toorkistan. All of them seem to be collected in one river, ultimately lost in a lake beyond Toorfan. Even this river is not reported to be of very great magnitude: this is another reason to disbelieve the existence of a very high and snowy range in this quarter, for such is ever found to give source to great streams (see para. 7.) The Tukkus is laid down in the latest maps as running north into the Russian territory, but according to the information received by us, runs south into the Chinese. The geography of this country seems destined to remain long obscure. It is no longer the scene of important events, nor does it lie in the line of traveller's routes. The cities of Kashghur and Yarkund are indeed visited by merchants of Kushmeer, Pushwar, Budukhshan, and Toorkistan, and from them tea, silver, and some other Chinese commodities are diffused over the neighbouring countries. Few however proceed further, and inquiry is scarcely safe under the jealous and vigilant government of China.

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#### *Lakes.*

47. Most of the lakes of note have been already alluded to. The greatest is the Aral, which receives all the rivers of Toorkistan. Its waters are salt. Those of the lake of Seestan are slightly brackish. The whole of this last can be seen in one view by a spectator from the shore. It is encompassed by a tract of marshy land overgrown with reeds and aquatics, and a day's journey in breadth. In the middle is a little high island and on it a fort, this island is called Koh-i-zoor, and is in north latitude  $31^{\circ} 35'$  and east longitude  $63^{\circ} 25'$ . The well known Dul and Oollur are situated in Kushmeer. The latter is formed by the Uidusta; the former is unconnected with it, except that when raised by rains it discharges its superfluous waters into that river. No particulars are yet known of the lake of Toorfan (see para. 46) which is perhaps fabulous. Neither the

Aral nor the Seestan lake are navigated except by fishers or fowlers. The rivers too we have enumerated are more generally an obstruction to intercourse than a facility. Wood is indeed floated on them from the mountains, and in some cases goods are conveyed on rafts from a higher to a lower place. We are also to except the Indus and its eastern tributaries, which are navigated by trading boats as on the rivers of our own provinces. The trade thus carried on is indeed far inferior in amount to what is anticipated, and that especially in the case of the Indus. In lower Sindh and Kushmeer alone water carriage is the chief mode of transportation in the country. But these, and the particulars of ferries and fords, and modes of crossing rivers, need not be here mentioned in detail, since they are in the province of Lieut. Macartney. I may have appeared to have already greatly encroached on it, but this introductory matter seemed necessary to the readily and correctly apprehending what follows.

*(To be continued.)*

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